

[DIRECTIONAL CASING DRILLING]

Abstract

A directional casing drilling system including a casing string for rotation of a drill bit, a shaft coupled to the casing string, and a sleeve having pads that are hydraulically extensible. The sleeve may be positioned about a portion of the shaft. The invention may also include a tube connecting the sleeve to the drill collar, the tube adapted to conduct drilling fluid, and a valve system adapted to operatively conduct at least a portion of the drilling fluid to the pads whereby the pads move between an extended position and a retracted position.